0055234

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

1315 W. 4th Avenue • Kennewick, Washington 99336-6018 • (509) 735-7581

July 18, 2001

Mr. Joel Hebdon, Director
Regulatory Compliance and Analysis Division
P.O. Box 550, MSIN: A5-58
Richland, Washington 99352

Mr. Roby D. Enge, Director
Environment, Safety, and Health
P.O. Box 999, MSIN: P7-75
Richland, Washington 99352

Mr. Richard H. Gurske, Project Manager
Environmental Services
P.O. Box 1000, MSIN: H8-73
Richland, Washington 99352

Mr. T. E. Logan, Vice President, Operations
3350 George Washington Way, MSIN: H0-09
Richland, Washington 99352

Dear Messrs. Hebdon, Enge, Gurske, and Logan:

Re: Quarterly Notification of Class 1 Modifications to the Hanford Facility Resource Conservation and Recovery Act (RCRA) Permit, Dangerous Waste Portion (Quarter ending December 31, 2000 – Condition I.C.3)

Enclosed are the Modification Notification Forms indicating those modifications that the Washington State Department of Ecology (Ecology) has reviewed and approved for the referenced quarterly Class 1 Modifications.

The approved quarterly modifications include:

- Part III, Chapter 5 (Attachment 35 – 242-A Evaporator)
  - Hanford Facility RCRA Permit, III. 5.
  - Hanford Facility RCRA Permit, III. 5.B &
  - Appendix 3A, Section 1.1, Table 5-1, Table 5-2, Section 6.1.3, Table 6-2, Section 7.3, Table 7-2, Section 2.0, Figures, Tables, Sections 3.3, 4.1.2, 4.1.3, 5.1.3, 6.2, 7.2 & 7.3

- Part III, Chapter 2 (Attachment 18 – 305 B Storage Facility)
  - Hanford Facility RCRA Permit, III. 2.A (Chapter 4)
  - Hanford Facility RCRA Permit, III. 2.A (Chapter 6)
  - Chapter 4.0, Section 4.1.1.2
  - Chapter 6.0, Section 6.3.1.1
  - Chapter 6.0, Section 6.4.4

Part III, Chapter 6 (Attachment 36 – 325 Hazardous Waste Treatment Units)
- Hanford Facility RCRA Permit, III. 6.A. (Chapter 2.2)
- Hanford Facility RCRA Permit, III. 6.A. (Chapter 4.0)
- Hanford Facility RCRA Permit, III. 6.A. (Chapter 6.0)
- Hanford Facility RCRA Permit, III. 6.A. (appendix 3A)
- Chapters 2.0,4.0,6.0,11.0
- Chapter 4.0, Section 4.1.4.1
- Chapter 6.0, Section 6.3.1.3
- Appendix 3A, Figure 1-4

- Part V, Chapter 17 (1301-N Liquid Waste Disposal Facility)
  - Section A4.0
  - Section A4.9

The following proposed Class 1 modifications related to changes in Candidate Feed Tank Sample Collections & Candidate Feed Tank Sampling Quality Assurance and Quality Control are not approved:

- Part III, Chapter 5 (Attachment 35 – 242-A Evaporator)
  - Appendix 3A, Section 6.1.1
  - Appendix 3A, Section 6.1.2

The measurement should read 0.0348 meters for both sections.

I apologize for the delay. Again, United States Department of Energy and contractor staff are encouraged to discuss proposed Class 1 changes with Ecology's Unit Managers during the quarter to clarify any questions and/or concerns. If you have any questions or comments regarding this letter, please contact me at (509) 736-5715 or Jean Vanni at (509) 736-3046.

Sincerely,

Laura Ruud, Permitting Specialist
Nuclear Waste Program

LR: JV:nc
Enclosures

cc w/enclosure: Ellen Mattlin, USDOE
Lorna Dittmer, BHI
Suzette Thompson, FH
Alice Ikenberry, PNNL
J. H. Richards, CTUIR
Donna Powaukee, NPT
Russell Jim, YN
Administrative Record: SWP

cc w/o enclosure: Clifford Clark, USDOE
Sue Price, FH
Mary Lou Blazek, OOE
NWP Central File: State Wide Permit
NWP Reader File

Hanford Facility RCRA Permit Modification Notification Forms

Part III, Chapter 2 and Attachment 18
305-B Storage Facility

Index

Hanford Facility RCRA Permit Modification Notification Form

Unit:	Permit Part & Chapter:
305-B Storage Facility	**Part III, Chapter 2 and Attachment 18**

Description of Modification:

Hanford Facility RCRA Permit III.2.A.:

Chapter 4.0 Process Information, from Class 1 Modification for quarter ending December 31, ~~2000~~ ~~1998~~

Modification Class: [1,2,3]	Class 1	Class [1]1	Class 2	Class 3
Please check one of the Classes:	X			

Relevant WAC 173-303-830, Appendix I Modification: A.1.

Enter wording of the modification from WAC 173-303-830, Appendix I citation

A. **General Permit Provisions**

1. **Administrative and informational changes**

Submitted by Co-Operator:		Reviewed by RL Program Office:		Reviewed by Ecology:		Reviewed by Ecology:	
A.K. Ikenberry	Date	R.F. Christensen	12/29/00 Date	F. Jamison	Date	L.E. Ruud	6/18/01 Date

For

[1]Class 1 modifications requiring prior Agency approval.

[2] This is only an advanced notification of an intended Class [1]1, 2, or 3 modification, this should be followed with a formal modification request, and consequently implement the required Public Involvement processes when required.

[3] If the proposed modification does not match any modification listed in WAC 173-303-830 Appendix I, then the proposed modification should automatically be given a Class 3 status. This status may be maintained by the Department of Ecology, or down graded to [1]1, if appropriate.

Hanford Facility RCRA Permit Modification Notification Form

Unit:	Permit Part & Chapter:
305-B Storage Facility	**Part III, Chapter 2 and Attachment 18**

Description of Modification:

Hanford Facility RCRA Permit III.2.A.:

Chapter 6.0 Procedures to Prevent Hazards, from Class 1 Modification for quarter ending December 31, 2000 ~~1998~~

Modification Class: [1 2 3]	Class 1	Class [1]1	Class 2	Class 3
Please check one of the Classes:	X			

Relevant WAC 173-303-830, Appendix I Modification: A.1.

Enter wording of the modification from WAC 173-303-830, Appendix I citation

A. **General Permit Provisions**

1. **Administrative and informational changes**

Submitted by Co-Operator:		Reviewed by RL Program Office:		Reviewed by Ecology:		Reviewed by Ecology:	
A.K. Ikenberry	Date	R.F. Christensen for	Date	F. Jamison	Date	L.E. Ruud	Date
			12/29/00				6/18/01

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Hanford Facility RCRA Permit Modification Notification Form

Unit:	Permit Part & Chapter:
305-B Storage Facility	**Part III, Chapter 2 and Attachment 18**

Description of Modification:

Remove Chapter 4.0 and replace with the attached Chapter 4.0.
Chapter 4.0, Section 4.1.1.2:

4.1.1.2 Container Management Practices [D-1a(2)]

Management practices and procedures for containers of dangerous waste are in place at the 305-B Storage Facility to assure the safe receipt, handling, preparation for transport, and transportation of wastes. These practices and procedures are summarized below.

Inspection of Containers. A system of daily, weekly, monthly, and yearly inspections is in place to ensure container integrity, check for proper storage location, prevent capacity overrun, etc. These inspection procedures are detailed in Section 6.2.

Container Handling. All unit staff is instructed in proper container handling safeguards as part of their training (refer to Section 8.1.2 for further details). For example, employees are instructed to open all high-vapor-pressure liquids in the flammable liquid bulking module to avoid buildup of vapors in the unit. Containers are always kept closed except when adding or removing waste, in accordance with WAC 173-303-630(5)(a).

Containers are not opened, handled or stored in a manner that would cause the container to leak or rupture. Small containers (five gallons or less capacity) are stored on ventilated shelving or in approved flammable liquid storage lockers (if appropriate). Containers over five gallons capacity are stored on the floor of the appropriate storage cell, in cabinets, or stored in the appropriate containment area on the high bay floor under Section 4.3.2. Unnecessary handling not required for redistribution or preparation for transport and disposal by either labpacking or bulking is minimized. Crane or chain hoist, or ~~with an electric~~ forklift moves drums manually. For manual movement, hand trucks specifically designed for drum handling are used. Crane and chain hoist operations are performed using a choker chain or drum hoist. When using the forklift, a drum hoist is used or the drums are carried on pallets. Drums are never carried on the forks or "speared" by slipping the forks under the chime. When waste handling operations are conducted, a minimum of two persons is present in the unit.

Modification Class: [1] [2] [3]	Class 1	Class [1]1	Class 2	Class 3
Please check one of the Classes:	X			

Relevant WAC 173-303-830, Appendix I Modification: A.1.

Enter wording of the modification from WAC 173-303-830, Appendix I citation

A. General Permit Provisions

1. Administrative and informational changes

Submitted by Co-Operator:		Reviewed by RL Program Office:		Reviewed by Ecology:		Reviewed by Ecology:	
A.K. Ikenberry	Date 13 Dec 00	R.F. Christensen	Date 12/29/00	F. Jamison	Date 12/26/01	L.E. Ruud	Date 6/14/01

[1]Class 1 modifications requiring prior Agency approval.

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Hanford Facility RCRA Permit Modification Notification Form

Unit:	Permit Part & Chapter:
305-B Storage Facility	**Part III, Chapter 2 and Attachment 18**

Description of Modification:

Remove Chapter 6.0 and replace with the attached Chapter 6.0.
Chapter 6.0, Section 6.3.1.1:

6.3.1.1 Internal Communications [F-3a(1)]

Internal communication systems are used to provide immediate emergency instruction to personnel in 305-B Storage Facility. Internal communications address general emergencies that may occur in the 300 Area as well as specific emergencies that may occur in 305-B Storage Facility.

Because of the nature of activities that occur in the 300 Area, the potential exists for emergencies outside of 305-B Storage Facility (e.g., release of radioactive materials) that could impact operations and staff in 305-B Storage Facility. For this reason, the general emergency signals for the 300 Area are applicable to 305-B Storage Facility. These signals are summarized in Table 6-1. Fire alarm signals are located in each building throughout the 300 Area. The nearest emergency siren for "area evacuation" and "take cover" is located 300 yards southeast of 305-B Storage Facility, on top of the 326 Building, and is audible in all parts of 305-B Storage Facility. Because fissile materials are not handled in 305-B Storage Facility, there is no criticality alarm for the unit.

Internal communications to provide emergency instruction in the event of an emergency in 305-B Storage Facility are fire alarms, public address (PA) system, and telephones. The fire alarms are to be used to provide notification for immediate evacuation of 305-B Storage Facility. Fire alarm pull boxes are located at all exits of the facility such that operating personnel have immediate access to one in all portions of 305-B Storage Facility. Four-fire alarm bells are located within the 305-B Storage Facility and are audible at all locations within the building. The locations of the fire alarm bells are shown in Figure 6-4 and are as follows: (1) an office wing on the northeast hall; (2) an office wing next to the east entrance; (3) on the south wall of the basement; and (4) on the northeast wall of the high bay. The PA system is to be used for building-wide broadcasting of verbal emergency instructions to 305-B Storage Facility staff. The PA system can be accessed from any unit telephone by dialing [redacted]6-1885. The PA system speakers are located in the high bay, in the basement, and in the office wing of 305-B Storage Facility.

The telephone system is to be used to provide verbal emergency instructions to 305-B Storage Facility staff. The telephone can also be used to verbally transmit emergency data to non-305-B Storage Facility staff, and to request emergency services. A network of telephones covers both floors of the facility. Locations of telephones are shown in Figure 6-4. ~~In addition to the telephone communication system at 305-B, operation personal have access to hand held radios.~~

Modification Class: [1 2 3]	Class 1	Class [1]1	Class 2	Class 3
Please check one of the Classes:	X			

Relevant WAC 173-303-830, Appendix I Modification: A.1.

Enter wording of the modification from WAC 173-303-830, Appendix I citation

A. General Permit Provisions
1. Administrative and informational changes

Submitted by Co-Operator:		Reviewed by RL Program Office:		Reviewed by Ecology:		Reviewed by Ecology:	
A.K. Ikenberry	Date	R.F. Christensen	Date	F. Jamison	Date	L.E. Ruud	Date
		for	12/29/00		6/6/01		6/11/01

[1]Class 1 modifications requiring prior Agency approval.

[2] This is only an advanced notification of an intended Class [1]1, 2, or 3 modification, this should be followed with a formal modification request, and consequently implement the required Public Involvement processes when required.

[3] If the proposed modification does not match any modification listed in WAC 173-303-830 Appendix I, then the proposed modification should automatically be given a Class 3 status. This status may be maintained by the Department of Ecology, or down graded to [1]1, if appropriate.

Hanford Facility RCRA Permit Modification Notification Form

Unit:	Permit Part & Chapter:
305-B Storage Facility	**Part III, Chapter 2 and Attachment 18**

Description of Modification:

Chapter 6.0, Section 6.4.4:

6.4.4 Equipment and Power Failure [F-4d]

The 305-B Storage Facility does not have any systems that would cause release of dangerous waste or RMW during a power failure or equipment failure. Interruption of power to any of the systems utilizing electrical power (HVAC system, crane, forklift) merely causes the equipment to stop operating. The unit has an emergency lighting system that operates automatically during power failure incidents.

For actions to be taken in the event of power failure to unit systems or equipment, ~~see~~ [redacted] the unit [redacted] Contingency Plan (Chapter 7).

Modification Class: [1,2,3]	Class 1	Class [1]1	Class 2	Class 3
Please check one of the Classes:	X			

Relevant WAC 173-303-830, Appendix I Modification: A.1.

Enter wording of the modification from WAC 173-303-830, Appendix I citation

A. **General Permit Provisions**

1. **Administrative and informational changes**

Submitted by Co-Operator:		Reviewed by RL Program Office:		Reviewed by Ecology:		Reviewed by Ecology:	
A.K. Ikenberry	Date	R.F. Christensen for	Date 12/29/00	F. Jamison	Date	L.E. Ruud	Date 6/18/01

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Hanford Facility RCRA Permit Modification Notification Forms

Part III, Chapter 5 and Attachment 35
242-A Evaporator

Index

Hanford Facility RCRA Permit Modification Notification Form

Unit:	Permit Part & Chapter:
242-A Evaporator	**Part III, Chapter 5 and Attachment 35**

Description of Modification:

Hanford Facility RCRA Permit, III.5.A.:

Appendix 3A Waste Analysis Plan for 242-A Evaporator, from Class [redacted] 1 Modification ~~from quarter ending March 31, 1998~~

Modification Class: [1 2 3]	Class 1	Class [1]1	Class 2	Class 3
Please check one of the Classes:	X			

Relevant WAC 173-303-830, Appendix I Modification: A.1.

Enter wording of the modification from WAC 173-303-830, Appendix I citation

A. General Permit Provisions

1. Administrative and informational changes.

Submitted by Co-Operator:	Reviewed by RL Program Office:	Reviewed by Ecology:	Reviewed by Ecology:
E. S. Aromi 12/06/00	G. H. Sanders 12/7/00	F. Jamison 06/06/01	L.E. Ruud 6/18/01
E. S. Aromi Date	G. H. Sanders Date	F. Jamison Date	L.E. Ruud Date

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Hanford Facility RCRA Permit Modification Notification Form

Unit:	Permit Part & Chapter:
242-A Evaporator	**Part III, Chapter 5 and Attachment 35**

Description of Modification:

Appendix 3A: Incorporated Permit conditions into Appendix 3A. Delete the following Permit Conditions from the Hanford Facility RCRA Permit:

~~III.5.B. AMENDMENTS TO THE APPROVED PERMIT APPLICATION~~

~~III.5.B.a. Appendix 3A, Waste Analysis Plan (WAP) for 242-A Evaporator~~

~~III.5.B.a.1. Section 1.1 Purpose~~

~~The sentence beginning on line 23 of page 1-1 is modified to read as follows: "Sampling and analysis identified in the DQO analysis related to meeting RCRA requirements are included as an integral part of this WAP."~~

Appendix 3 A, Section 1.1:

1.1 PURPOSE

The purpose of the WAP is to ensure waste at the 242-A Evaporator is managed properly in accordance with WAC 173-303-300. To ensure the waste analysis is comprehensive, a data quality objectives (DQO) analysis was performed on all streams at the 242-A Evaporator. Sampling and analysis identified in the DQO analysis related to meeting RCRA requirements are included [redacted] ~~in this~~ WAP.

Regulatory and safety issues are addressed in the WAP by establishing boundary conditions for waste to be received and treated at the 242-A Evaporator. The boundary conditions are set by establishing limits for items such as reactivity, waste compatibility, and control of vessel vent organic emissions. Waste that exceeds the boundary conditions would not be acceptable for processing without further actions, such as blending with other waste.

Modification Class: [1][2][3]	Class 1	Class [1]1	Class 2	Class 3
Please check one of the Classes:	X			

Relevant WAC 173-303-830, Appendix I Modification: A.1.

Enter wording of the modification from WAC 173-303-830, Appendix I citation

A. **General Permit Provisions**

1. **Administrative and informational changes.**

Submitted by Co-Operator:	Reviewed by RL Program Office:	Reviewed by Ecology:	Reviewed by Ecology:
E.S. Aromi 12/06/00	G.H. Sanders 12/7/00	F. Jamison 6/8/01	L.E. Ruud 6/18/01
E. S. Aromi Date	G. H. Sanders Date	F. Jamison Date	L.E. Ruud Date

[1] Class 1 modifications requiring prior Agency approval.

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Hanford Facility RCRA Permit Modification Notification Form

Unit:	Permit Part & Chapter:
242-A Evaporator	**Part III, Chapter 5 and Attachment 35**

Description of Modification:

Appendix 3A: Incorporated Permit conditions into Appendix 3A. Delete the following Permit Condition from the Hanford Facility RCRA Permit:

~~III.5.B.a.2. Section 5.0, 242-A Evaporator Acceptance Criteria~~

~~Table 2, Page 5-4, Line 1, Change title to, "Candidate Feed Tank Limits for Vessel Vent Organic Discharge"~~

Appendix 3A, Table 5-1:

Table 2[redacted]. Candidate ~~Waste~~ [redacted] Tank Limits for Vessel Vent Organic Discharge[a].

Feed constituent	Limit (milligrams per liter) [b,c]
Acetone	174.4 ([R-1]/R)
1-Butanol	452 ([R-1]/R)
2-Butoxyethanol	190.4 ([R-1]/R)
2-Butanone	116 ([R-1]/R)
Tri-butyl phosphate	2.03E+4 ([R-1]/R)
Total carbon and Total inorganic carbon	$(C_T\text{-}IC_T) < 174.4$ ([R-1]/R) (as acetone)

[a] Limits are based on a maximum continuous operating time equivalent to 6 months per year. If total operating time is expected to exceed 6 months per year, the limits must be re-evaluated.

$$\sum_{n=1}^{i}\left(\frac{Conc_n}{LIMIT_n}\right) \le 1$$

[b] The limits are applied using the sum of the fractions technique: W[redacted]here i is the number of organic constituents detected in analysis of the waste feed tank. Total carbon and total inorganic carbon analysis are not part of the summation.

[c] R is the ratio of feed flow rate to slurry flow rate (typically R = 2).

Modification Class: [1 2 3]	Class 1	Class [1]1	Class 2	Class 3
Please check one of the Classes:	X			

Relevant WAC 173-303-830, Appendix I Modification: A.1.

Enter wording of the modification from WAC 173-303-830, Appendix I citation

A. General Permit Provisions

1. Administrative and informational changes.

Submitted by Co-Operator:	Reviewed by RL Program Office:	Reviewed by Ecology:	Reviewed by Ecology:
12/06/00	12/7/00	06/06/01	6/18/01
E. S. Aromi Date	G. H. Sanders Date	F. Jamison Date	L.E. Ruud Date

[1] Class 1 modifications requiring prior Agency approval.

[2] This is only an advanced notification of an intended Class [1]1, 2, or 3 modification, this should be followed with a formal modification request, and consequently implement the required Public Involvement processes when required.

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Hanford Facility RCRA Permit Modification Notification Form

Unit:	Permit Part & Chapter:
242-A Evaporator	**Part III, Chapter 5 and Attachment 35**

Description of Modification:

Appendix 3A: Incorporated Permit conditions into Appendix 3A. Delete the following Permit Condition from the Hanford Facility RCRA Permit:

~~III.5.B.a.3. Section 5.0, 242-A Evaporator Acceptance Criteria~~

~~Table 3, Page 5-5, Add footnote "f" to title of the table; and add footnote "f." This table is used to ensure process condensate generated from candidate feed tank treatment is within LERF liner compatibility limits"~~

Appendix 3A, Table 5-2:

Table 3[redacted]. Candidate Feed Tank Limits for LERF Liner Compatibility.

Chemical family/parameter [a]	Current target compounds	Limit (milligrams per liter) [b,c]
Alcohol/glycol	1-Butanol	500,000 ([R-1]/R)
Alkanone [d]	Sum of acetone, 2-butanone	200,000 ([R-1]/R)
Alkenone [e]	None targeted	2,000 ([R-1]/R)
Aromatic/cyclic hydrocarbon	None targeted	2,000 ([R-1]/R)
Halogenated hydrocarbon	None targeted	2,000 ([R-1]/R)
Aliphatic hydrocarbon	None targeted	500,000 ([R-1]/R)
Ether	2-Butoxyethanol	2,000 ([R-1]/R)
Other hydrocarbons	Tri-butyl phosphate	2,000 ([R-1]/R)
Oxidizers	None targeted	1,000 ([R-1]/R)
Acids, bases, and salts	Ammonia	100,000 ([R-1]/R)
Total carbon and total onorganic carbon	Not applicable	$(C_T\text{-}IC_T) < 1{,}240$ ([R-1]/R) (as acetone)

[a] If a chemical fits in more than one chemical family, the more restrictive limit applies.
[b] The limits are applied using the sum of the fractions technique: [redacted]here i is the number of constituents detected in analysis of the waste feed tank. Total carbon and total inorganic carbon analysis are not part of the summation.

$$\sum_{n=1}^{i}\left(\frac{Conc_n}{LIMIT_n}\right) \le 1$$

[c] R is the ratio of feed flow rate to slurry flow rate (typically R = 2).
[d] Ketone containing only saturated alkyl group(s)
[e] Ketone containing unsaturated alkyl group(s)

[redacted]

Modification Class: [1 2 3]	Class 1	Class [1]1	Class 2	Class 3
Please check one of the Classes:	X			

Relevant WAC 173-303-830, Appendix I Modification: A.1.

Enter wording of the modification from WAC 173-303-830, Appendix I citation

A. General Permit Provisions
   1. Administrative and informational changes.

Submitted by Co-Operator:	Reviewed by RL Program Office:	Reviewed by Ecology:	Reviewed by Ecology:
12/06/00	12/7/00	06/06/01	6/18/01
E. S. Aromi Date	G. H. Sanders Date	F. Jamison Date	L.E. Ruud Date

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Hanford Facility RCRA Permit Modification Notification Form

Unit:	Permit Part & Chapter:
242-A Evaporator	**Part III, Chapter 5 and Attachment 35**

Description of Modification:

Appendix 3A: Incorporated Permit conditions into Appendix 3A. Delete the following Permit Condition from the Hanford Facility RCRA Permit:

~~III.5.B.a.6. Section 6.1.3. Process Condensate Sample Collection~~

~~Append to lines 32 through 33 on page 6-2 ["Samples of process condensate are collected in a manner consistent with SW-846 procedures (EPA 1986)."] the following text: "...as documented in sampling procedures which are maintained and implemented by unit personnel"~~

Appendix 3A, Section 6.1.3:

6.1.3 Process Condensate Sample Collection

Process condensate samples, when performed at 242-A Evaporator instead of LERF, are taken from the process condensate transfer line in the condenser room of the 242-A Building. Grab sampling is performed during the campaign on the transfer line downstream of the ion exchange column at the SAMP-RC3-2 sampler or other sample port. Samples of process condensate are collected in a manner consistent with SW-846 procedures (EPA 1986) [redacted].

Modification Class: [1,2,3]	Class 1	Class [1]1	Class 2	Class 3
Please check one of the Classes:	X			

Relevant WAC 173-303-830, Appendix I Modification: A.1.

Enter wording of the modification from WAC 173-303-830, Appendix I citation

A. General Permit Provisions

1. Administrative and informational changes.

Submitted by Co-Operator:	Reviewed by RL Program Office:	Reviewed by Ecology:	Reviewed by Ecology:
12/06/00	12/7/00	12/20/01	6/18/01
E. S. Aromi Date	G. H. Sanders Date	F. Jamison Date	L.E. Ruud Date

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Hanford Facility RCRA Permit Modification Notification Form

Unit:	Permit Part & Chapter:
242-A Evaporator	**Part III, Chapter 5 and Attachment 35**

Description of Modification:

Appendix 3A: Incorporated Permit conditions into Appendix 3A. Delete the following Permit Condition from the Hanford Facility RCRA Permit:

~~III.5.B.a.7. Table 5. Analytes for Candidate Feed Tanks~~

~~On page 6-4, delete the word "method" and insert the word "technique" in the heading of column 2~~

Appendix 3A, Table 6-2:

Table 6[redacted]. Analytes for Candidate Feed Tanks.

Parameter	Test [redacted] ~~method~~	Analyte	Rationale
Exotherm	Differential scanning calorimeter	Temperature and energy	Verify the waste will not undergo an exothermic reaction (Section 5.1.1).
Compatibility test	Mixing and compatibility study	Visual physical changes	Verify the waste is chemically compatible (Section 5.1.2).
Organic compounds	Gas chromatograph/ mass spectrometer	Acetone, 1-Butanol, 1-Butoxyethanol, 1-Butanone, Tri-butyl phosphate	Used in calculations to verify that vessel vent emissions will not exceed regulatory limits and to prevent compatibility problems with the LERF liner (Section 5.1.3).
	Carbon coulometric detector	Total carbon, Total inorganic carbon	Used in calculations to verify that vessel vent emissions will not exceed regulatory limits and to prevent compatibility problems with the LERF liner (Section 5.1.3).
Ammonia	Ion selective electrode	Ammonia	To prevent compatibility problems with the LERF liner (Section 5.1.3).

Modification Class: [1 2 3]	Class 1	Class [1]1	Class 2	Class 3
Please check one of the Classes:	X			

Relevant WAC 173-303-830, Appendix I Modification: A.1.

Enter wording of the modification from WAC 173-303-830, Appendix I citation

A. General Permit Provisions

1. Administrative and informational changes.

Submitted by Co-Operator:	Reviewed by RL Program Office:	Reviewed by Ecology:	Reviewed by Ecology:
12/6/00	12/7/00	12/8/00	6/18/01
E. S. Aromi Date	G. H. Sanders Date	F. Jamison Date	L.E. Ruud Date

[1] Class 1 modifications requiring prior Agency approval.

[2] This is only an advanced notification of an intended Class [1]1, 2, or 3 modification, this should be followed with a formal modification request, and consequently implement the required Public Involvement processes when required.

[3] If the proposed modification does not match any modification listed in WAC 173-303-830 Appendix I, then the proposed modification should automatically be given a Class 3 status. This status may be maintained by the Department of Ecology, or down graded to [1]1, if appropriate.

Hanford Facility RCRA Permit Modification Notification Form

Unit:	Permit Part & Chapter:
242-A Evaporator	**Part III, Chapter 5 and Attachment 35**

Description of Modification:

Appendix 3A: Incorporated Permit conditions into Appendix 3A. Delete the following Permit Conditions from the Hanford Facility RCRA Permit:

~~III.5.B.a.8. Section 7.3 Laboratory QA/QC~~

~~In line 40, delete "matrix spike " and on line 43, replace "accuracy" with "precision" and add a new sentence at the end of the paragraph, "Accuracy for DSC is evaluated by using the laboratory control standard"~~

~~III.5.B.a.9. Section 7.3 Laboratory QA/QC~~

~~Add a new paragraph, "The QA/QC program for sampling and analysis related to this unit must, at a minimum, comply with the applicable Hanford Site standard requirements and the regulatory requirements. All analytical data shall be defensible and shall be traceable to specific, related quality control samples and calibrations"~~

Appendix 3A, Section 7.3:

7.3 LABORATORY QUALITY ASSURANCE AND QUALITY CONTROL

Candidate feed tank analytical and sampling methods conducted as part of this plan meet the data quality requirements contained in Table 7[redacted]. Quality control check samples (i.e., calibration samples and/or laboratory control samples) generally are performed once per sample event (e.g., once for all samples from one candidate feed tank). Matrix spike and ~~matrix spike~~duplicate analysis are performed once per sample event for all methods except differential scanning calorimetry (DSC). A duplicate analysis is performed for DSC analysis to determine method [redacted] ~~accuracy~~.

[redacted]

Modification Class: [1,2,3]	Class 1	Class [1]1	Class 2	Class 3
Please check one of the Classes:	X			

[redacted]

Relevant WAC 173-303-830, Appendix I Modification: A.1.

Enter wording of the modification from WAC 173-303-830, Appendix I citation

A. General Permit Provisions

1. Administrative and informational changes.

[redacted]

Submitted by Co-Operator:	Reviewed by RL Program Office:	Reviewed by Ecology:	Reviewed by Ecology:
ES Aromi 12/06/00	G. H. Sanders 12/7/00	F. Jamison 06/06/01	L.E. Ruud 6/18/01
E. S. Aromi Date	G. H. Sanders Date	F. Jamison Date	L.E. Ruud Date

[1] Class 1 modifications requiring prior Agency approval.

[2] This is only an advanced notification of an intended Class [1]1, 2, or 3 modification, this should be followed with a formal modification request, and consequently implement the required Public Involvement processes when required.

[3] If the proposed modification does not match any modification listed in WAC 173-303-830 Appendix I, then the proposed modification should automatically be given a Class 3 status. This status may be maintained by the Department of Ecology, or down graded to [1]1, if appropriate.

Hanford Facility RCRA Permit Modification Notification Form

Unit:	Permit Part & Chapter:
242-A Evaporator	**Part III, Chapter 5 and Attachment 35**

Description of Modification:

Appendix 3A: Incorporated Permit conditions into Appendix 3A. Delete the following Permit Conditions from the Hanford Facility RCRA Permit:

~~III.5.B.a.10. Table 7. Quality Assurance Objectives for Candidate Feed Tank Stream Analytes~~
~~Delete the word "Objectives" from the title of the table and insert the word "Requirements"~~

~~III.5.B.a.11. Table 7. Quality Assurance Objectives for Candidate Feed Tank Stream Analytes~~
~~In column 4, delete the words "matrix spike," so the heading reads as follows: "Precision (RPD between duplicates), %"~~

~~III.5.B.a.12. Table 7. Quality Assurance Objectives for Candidate Feed Tank Stream Analytes. Delete Footnote 1 and replace with "Reserved"~~

~~III.5.B.a.13. Table 7. Quality Assurance Objectives for Candidate Feed Tank Stream Analytes. In line 6, under "Accuracy" column, add "4" to table entry "N/A" and add to the end of footnote 4, "Accuracy for DSC is evaluated by using the laboratory control standard"~~

Appendix 3A, Table 7-2:

Table 7[illegible]. Quality Assurance Objectives [illegible] for Candidate Feed Tank Stream Analytes.

Category	Analyte	Estimated quantitation limit (matrix specific)	Precision (RPD between ~~matrix spike~~ duplicates[4]), %	Accuracy (recovery of matrix spike[1]), %	Action level[2]
Organics	Acetone	28 mg/L	<25	40-110	> 87 mg/L[3]
	1-Butanol	20 mg/L	<25	30-110	> 226 mg/L[3]
	2-Butoxyethanol	30 mg/L	<25	30-110	> 95.2 mg/L[3]
	2-Butanone (methyl ethyl ketone)	18 mg/L	<25	40-110	> 58 mg/L[3]
	Tri-butyl phosphate	50 mg/L	<25	40-125	> 1.015E+4 mg/L[3]
Inorganic	Ammonia	400 µg/ml	<20	75-125	> 50,000 mg/L
Other	Exotherm	None	<20[4]	~~N/A~~ [illegible]	< 168 °C or absolute value of ratio of exotherm to endotherm > 1
	Mixing and compatibility study	Not applicable	Not Applicable	Not Applicable	Visual: unusual changes in color, temperature, clarity, etc.
	Total carbon	25 µg/mL	<20	75-125	C_T-IC_T > 87 mg/L
	Total inorganic carbon	25 µg/mL	<20	75-125	C_T-IC_T > 87 mg/L

1. [illegible]. ~~One matrix spike and one matrix spike duplicate analysis performed for each sample event.~~
2. In deriving the action levels, the ratio of feed flow rate to slurry flow rate (R) is assumed to be 2.
3. For organic species limits, sum of the fractions rule applies (refer Tables 2 and 3). Total carbon and total inorganic carbon are not included in the summation of organics.
4. Precision for this method is evaluated by the deviation between sample (unspiked) and sample replicate. [illegible]

RPD - relative percent difference
C_T - total inorganic carbon
IC_T - total inorganic carbon
mg/L - milligram per liter
µg/L - microgram per liter

Modification Class: [1] [2] [3]	Class 1	Class [1]1	Class 2	Class 3
Please check one of the Classes:	X			

Relevant WAC 173-303-830, Appendix I Modification: A.1.

Enter wording of the modification from WAC 173-303-830, Appendix I citation

A. General Permit Provisions
1. Administrative and informational changes.

Submitted by Co-Operator:	Reviewed by RL Program Office:	Reviewed by Ecology:	Reviewed by Ecology:
12/06/00	12/7/00	12/8/01	12/18/01
E. S. Aromi Date	G. H. Sanders Date	F. Jamison Date	L.E. Ruud Date

[1] Class 1 modifications requiring prior Agency approval.

[2] This is only an advanced notification of an intended Class [1]1, 2, or 3 modification, this should be followed with a formal modification request, and consequently implement the required Public Involvement processes when required.

[3] If the proposed modification does not match any modification listed in WAC 173-303-830 Appendix I, then the proposed modification should automatically be given a Class 3 status. This status may be maintained by the Department of Ecology, or down graded to [1]1, if appropriate.

Hanford Facility RCRA Permit Modification Notification Form

Unit:	Permit Part & Chapter:
242-A Evaporator	**Part III, Chapter 5 and Attachment 35**

Description of Modification:

Appendix 3A: Remove Appendix 3A and replace with the attached Appendix 3A.

Section 2.0:

2.0 242-A EVAPORATOR PROCESS DESCRIPTION

The 242-A Evaporator, located in the 200 East Area of the Hanford Site, separates the incoming waste from the DST System into two aqueous streams as described in the following paragraph. Also associated with the 242-A Evaporator are utility waste streams such as cooling water and steam condensate which are not dangerous waste. Description of the waste processed by the 242-A Evaporator [redacted] ~~are~~ described in Section 3.0.

The 242-A Evaporator process uses a conventional forced-circulation, vacuum evaporation system to concentrate mixed waste solutions from the DST System tanks. The incoming stream is separated by evaporation into two liquid streams: a concentrated slurry stream and a process condensate stream. The slurry contains the majority of the radionuclides and inorganic constituents. After the slurry is concentrated to the desired amount, the slurry stream is pumped back to the DST System and stored for further treatment. Vapor from the evaporation process is condensed, producing process condensate, which is primarily water with trace amounts of organic material and a greatly reduced concentration of radionuclides. The process condensate is transferred to LERF for storage and treatment. Vacuum for the evaporator vessel is provided by two steam jet ejectors, producing a gaseous vessel vent exhaust. The 242-A Evaporator vessel vent stream is filtered and discharged through an exhaust stack. Figure [redacted]1 shows a simplified schematic of the 242-A Evaporator process. A more detailed description of the 242-A Evaporator process is provided in Chapter 4.0 of the *Hanford Facility Dangerous Waste Permit Application, 242-A Evaporator* (DOE/RL-90-42).

Modification Class: [1,2,3]	Class 1	Class [1]1	Class 2	Class 3
Please check one of the Classes:	X			

Relevant WAC 173-303-830, Appendix I Modification: A.1.

Enter wording of the modification from WAC 173-303-830, Appendix I citation

A. General Permit Provisions

1. Administrative and informational changes.

Submitted by Co-Operator:	Reviewed by RL Program Office:	Reviewed by Ecology:	Reviewed by Ecology:
12/06/00	12/7/00	12/8/00	12/18/00
E. S. Aromi Date	G. H. Sanders Date	F. Jamison Date	L.E. Ruud Date

[1] Class 1 modifications requiring prior Agency approval.

[2] This is only an advanced notification of an intended Class [1]1, 2, or 3 modification, this should be followed with a formal modification request, and consequently implement the required Public Involvement processes when required.

[3] If the proposed modification does not match any modification listed in WAC 173-303-830 Appendix I, then the proposed modification should automatically be given a Class 3 status. This status may be maintained by the Department of Ecology, or down graded to [1]1, if appropriate.

Hanford Facility RCRA Permit Modification Notification Form

Unit:	Permit Part & Chapter:
242-A Evaporator	**Part III, Chapter 5 and Attachment 35**

Description of Modification:

Appendix 3A: The figures were renumbered throughout the document because of conversion to Microsoft Word.

Figure [redacted]1. 242-A Evaporator Simplified Schematic.

Figure [redacted]~~2~~. Strategy for Determining the Number of Candidate Feed Tank Samples.

Figure [redacted]~~3~~. Strategy for Verifying the Number of Candidate Feed Tank Samples.

Modification Class: [1,2,3]	Class 1	Class [1]1	Class 2	Class 3
Please check one of the Classes:	X			

Relevant WAC 173-303-830, Appendix I Modification: A.1.

Enter wording of the modification from WAC 173-303-830, Appendix I citation

A. General Permit Provisions

1. Administrative and informational changes.

Submitted by Co-Operator:	Reviewed by RL Program Office:	Reviewed by Ecology:	Reviewed by Ecology:
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E. S. Aromi Date	G. H. Sanders Date	F. Jamison Date	L.E. Ruud Date

[1] Class 1 modifications requiring prior Agency approval.

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Hanford Facility RCRA Permit Modification Notification Form

Unit:	Permit Part & Chapter:
242-A Evaporator	**Part III, Chapter 5 and Attachment 35**

Description of Modification:

Appendix 3A: The tables were renumbered throughout the document because of conversion to Microsoft Word.

Table [redacted]1. Waste Designation For Process Condensate.

Table [redacted]2. Candidate [redacted] ~~Waste~~ Tank Limits for Vessel Vent Organic Discharge[a].

Table [redacted]3. Candidate Feed Tank Limits for LERF Liner Compatibility.

Table [redacted]4. Candidate Feed Tank Sample Point Selection.

Table [redacted]5. Analytes for Candidate Feed Tanks.

Table [redacted]6. Analytical Methods for Candidate Feed Tank Stream Analytes.

Table [redacted]7. Quality Assurance ~~Objectives~~ [redacted] for Candidate Feed Tank Stream Analytes.

Modification Class: [1 2 3]	Class 1	Class [1]1	Class 2	Class 3
Please check one of the Classes:	X			

Relevant WAC 173-303-830, Appendix I Modification: A.1.

Enter wording of the modification from WAC 173-303-830, Appendix I citation

A. **General Permit Provisions**

1. **Administrative and informational changes.**

Submitted by Co-Operator:	Reviewed by RL Program Office:	Reviewed by Ecology:	Reviewed by Ecology:
12/06/00	12/1/00	12/14/01	12/18/01
E. S. Aromi Date	G. H. Sanders Date	F. Jamison Date	L.E. Ruud Date

[1] Class 1 modifications requiring prior Agency approval.

[2] This is only an advanced notification of an intended Class [1]1, 2, or 3 modification, this should be followed with a formal modification request, and consequently implement the required Public Involvement processes when required.

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Hanford Facility RCRA Permit Modification Notification Form

Unit:	Permit Part & Chapter:
242-A Evaporator	**Part III, Chapter 5 and Attachment 35**

Description of Modification:

Appendix 3A, Section 3.3:

3.3 DANGEROUS WASTE NUMBERS

Waste transferred to the 242-A Evaporator could be assigned any of the dangerous waste numbers found in the Part A, Form 3 given in Chapter 1.0 and in the *Hanford Facility Dangerous Waste Part A Permit Application* (DOE/RL-88-21). These numbers are identical to the ones in the Part A, Form 3 for the DST System. Because of blending that occurs within the DST System, waste transferred to the 242-A Evaporator usually do not display all the characteristics found in the Part A, Form 3s, for these TSD units.

Process knowledge and historical data indicate that the slurry stream returning to the DST System contains the same dangerous waste constituents as the waste feed, so the same dangerous waste numbers are applicable to the feed and slurry.

Table 1 lists the dangerous waste numbers assigned to the process condensate. The process condensate is designated with the dangerous waste numbers F001 to F005 because ~~it~~ is derived from treatment of DST System waste assigned these numbers.

Modification Class: [1][2][3]	Class 1	Class [1]1	Class 2	Class 3
Please check one of the Classes:	X			

Relevant WAC 173-303-830, Appendix I Modification: A.1.

Enter wording of the modification from WAC 173-303-830, Appendix I citation

A. **General Permit Provisions**

1. **Administrative and informational changes.**

Submitted by Co-Operator:	Reviewed by RL Program Office:	Reviewed by Ecology:	Reviewed by Ecology:
12/06/00	12/7/00	12/8/01	12/18/01
E. S. Aromi Date	G. H. Sanders Date	F. Jamison Date	L.E. Ruud Date

[1] Class 1 modifications requiring prior Agency approval.

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Hanford Facility RCRA Permit Modification Notification Form

Unit:	Permit Part & Chapter:
242-A Evaporator	**Part III, Chapter 5 and Attachment 35**

Description of Modification:

Appendix 3A, Sections 4.1.2 & 4.1.3:

4.1.2 Determining the Number of Candidate Feed Tank Samples

Once a candidate feed tank is selected, the number of tank samples to be taken is determined by statistical analysis using existing tank data or data from similar waste in other tanks. Figure [redacted]2 illustrates the decision logic used to determine the number of samples to be taken. Preliminary concentrations of critical analytes are compared to the waste acceptability limits to statistically determine the number of samples necessary to verify the composition of the waste. The statistical analysis accounts for how close the concentrations of critical analytes are to the limits and the desired confidence level. The closer the concentrations are to the limits, or the greater the desired confidence level, the more samples must be taken. For regulatory compliance, acetone is used as the critical analyte because it is often present at elevated levels. A 95% confidence level is specified for acetone. Critical analytes for process control are also assessed. Acetone analysis is usually not available from preliminary data, so process control analytes (such as nitrate and hydroxide) are often used. The statistical analysis includes the generation of power curve calculations using *Data Quality Objectives Decision Error Feasibility Trials* (EPA 1994b) software developed by the EPA. This software requires input of minimum and maximum expected values, action levels, mean sample results, standard deviations of sample results, and upper and lower confidence levels. The software outputs the minimum number of samples required. In general, three samples are taken as a minimum because taking two samples would require resampling if one sample should be lost or contaminated in the laboratory. A maximum of five samples generally is applied to minimize exposure to sampling personnel.

4.1.3 Assessing Candidate Feed Tank Analysis

When results of the sample analysis are available (and before the waste is processed), a second statistical analysis, similar to the first, is performed with the new analyte data to verify a sufficient number of samples was ~~indeed~~ taken (Figure [redacted]3).

Candidate feed tank sampling and analysis, in conjunction with acceptance criteria in Section 5.0, are used to assess whether established limits would be exceeded. Based on the results, three possible options are implemented:

- The waste is acceptable for processing at the 242-A Evaporator without further actions.
- The waste is unacceptable for processing as a single batch, but is acceptable if blended with other waste to be processed.
- The waste is unacceptable for processing.

If the waste is suitable for evaporation, it will be transferred to the feed tank (241-AW-102) for processing.

Modification Class: [1] [2] [3]	Class 1	Class [1]1	Class 2	Class 3
Please check one of the Classes:	X			

Relevant WAC 173-303-830, Appendix I Modification: A.1.

Enter wording of the modification from WAC 173-303-830, Appendix I citation

A. General Permit Provisions

1. Administrative and informational changes.

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[1] Class 1 modifications requiring prior Agency approval.

[2] This is only an advanced notification of an intended Class [1]1, 2, or 3 modification, this should be followed with a formal modification request, and consequently implement the required Public Involvement processes when required.

[3] If the proposed modification does not match any modification listed in WAC 173-303-830 Appendix I, then the proposed modification should automatically be given a Class 3 status. This status may be maintained by the Department of Ecology, or down graded to [1]1, if appropriate.

Hanford Facility RCRA Permit Modification Notification Form

Unit:	Permit Part & Chapter:
242-A Evaporator	**Part III, Chapter 5 and Attachment 35**

Description of Modification:

Appendix 3A, Section 5.1.3:

5.1.3 Organic Constituents

The 242-A Evaporator performs distillation of waste containing organic concentrations greater than 10 parts per million by weight; therefore, organic air emissions are subject to WAC 173-303-690 (which incorporates 40 CFR 264, Subpart AA, by reference). Organic emissions from TSD units at the Hanford Site subject to 40 CFR 264, Subpart AA are controlled to ensure emissions to do not exceed 1.4 kilograms per hour ~~(3 pounds per hour)~~ and 2800 kilograms per year ~~(3.1 tons per year)~~. To ensure these requirements are met, the levels of volatile organics in the 242-A Evaporator feed must be limited to prevent excessive organic emissions during processing. Engineering calculations were used to determine the feed limits given in Table 2. The limits include a modifier "(R-1)/R", which adjusts the limits based on the campaign's planned boil-off rate. R is the ratio of feed flow rate to slurry flow rate. Typically, R is equal to 2, making (R-1)/R equal to 0.5.

In addition analysis of the individual components in Table 2, total carbon (C_T) and total inorganic carbon (IC_T) analysis are performed as a screening tool to account for other organic species that might be present in the waste. The value of C_T minus IC_T represents the total organic concentration in the waste. If the C_T minus IC_T limit is exceeded, additional volatile organic species might be present and a more detailed evaluation will be conducted to determine organic emissions out of the vessel vent. The limit for evaluation is 174.4 milligrams per liter, based on the conservative assumption that all organic species present in the waste are as volatile as acetone. Acetone was chosen because of its relatively high volatility and low percentage of carbon.

The level of volatile organics in the feed must also be limited to ensure organic constituents that transfer to the process condensate are compatible with the LERF liner. The high density polyethylene (HDPE) liner used at the LERF is exposed to process condensate that could contain trace quantities of chemicals that could cause degradation of the liner material. Based on the liner manufacturer's compatibility data, the concentration limits in Table 3 are imposed on those classes of constituents that could potentially degrade the liner. To ensure that these limits are not exceeded in the process condensate, the concentration limits are applied to the candidate feed tanks as well, with the modifier "(R-1)/R". A C_T minus IC_T analysis, similar to the one described previously, is also applied to the LERF liner limits. The strictest limit for organic species in Table 3 is 2,000 milligrams per liter. Assuming the organic is acetone (with its low percentage of carbon), this converts to a carbon value of 1,240 milligrams per liter.

The calculations in Tables 2 and 3 require use of the "sum of the fractions" technique. A calculation is performed where the analysis of each constituent is divided by its associated limit to produce a fraction of the limit. If the sum of these fractions is less than 1, the waste meets the requirements in the Table.

Modification Class: [1] [2] [3]	Class 1	Class [1]1	Class 2	Class 3
Please check one of the Classes:	X			

Relevant WAC 173-303-830, Appendix I Modification: A.1.

Enter wording of the modification from WAC 173-303-830, Appendix I citation

A. General Permit Provisions

1. Administrative and informational changes.

Submitted by Co-Operator:	Reviewed by RL Program Office:	Reviewed by Ecology:	Reviewed by Ecology:
12/06/00	12/7/00	06/06/01	6/18/01
E. S. Aromi Date	G. H. Sanders Date	F. Jamison Date	L.E. Ruud Date

[1] Class 1 modifications requiring prior Agency approval.

[2] This is only an advanced notification of an intended Class [1]1, 2, or 3 modification, this should be followed with a formal modification request, and consequently implement the required Public Involvement processes when required.

[3] If the proposed modification does not match any modification listed in WAC 173-303-830 Appendix I, then the proposed modification should automatically be given a Class 3 status. This status may be maintained by the Department of Ecology, or down graded to [1]1, if appropriate.

Hanford Facility RCRA Permit Modification Notification Form

Unit:	Permit Part & Chapter:
242-A Evaporator	**Part III, Chapter 5 and Attachment 35**

Description of Modification:

Appendix 3A, Section 6.1.1:

6.1.1 Candidate Feed Tank Sample Collection

Candidate feed tank samples are obtained by using a grab sampling method (e.g. "bottle on a string method") specified in ASTM E300, *Standard Practices for Sampling Industrial Chemicals* (ASTM 1986). The number of lateral sampling locations in candidate feed tanks is limited by the availability of tank risers providing access into the tank. Generally, only a few risers in each tank are actually available for sampling because the risers are dedicated to instrumentation or other uses. Sampling within a vertical column is generally limited only by the depth of waste in the tank. The criteria in Table [redacted] ~~4 is~~ [redacted] used when determining the specific sampling locations.

Riser selection is made by numbering the available risers that are at least 4.6 meters ~~(15 feet)~~ from each other and using a random number generator to select which risers will be used. Sample depths are determined by dividing the tank level into ~~1 foot~~ [redacted] increments and using a random number generator to determine a depth, which meets the criteria given in Table [redacted] 4.

Modification Class: [1] [2] [3]	Class 1	Class [1]1	Class 2	Class 3
Please check one of the Classes:	X			

Relevant WAC 173-303-830, Appendix I Modification: A.1.

Enter wording of the modification from WAC 173-303-830, Appendix I citation

A. **General Permit Provisions**

1. **Administrative and informational changes.**

Submitted by Co-Operator:	Reviewed by RL Program Office:	Reviewed by Ecology:	Reviewed by Ecology:
12/06/00	12/7/00		
E. S. Aromi Date	G. H. Sanders Date	F. Jamison Date	L.E. Ruud Date

[1] Class 1 modifications requiring prior Agency approval.

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Hanford Facility RCRA Permit Modification Notification Form

Unit:	Permit Part & Chapter:
242-A Evaporator	**Part III, Chapter 5 and Attachment 35**

Description of Modification:

Appendix 3A: Incorporated Permit conditions. Delete the following Permit Conditions from the Hanford Facility RCRA Permit:

~~III.5.B.a.4. Section 6.1.2. Candidate Feed Tank Sampling QA/QC~~
~~Delete lines 5 through 6 on page 6-2 ("Trip blanks are analyzed for those constituents detected in the field blanks.") and replace with the following: "Trip blanks are analyzed as independent samples for volatile organics analysis"~~

~~III.5.B.a.5. Section 6.1.2. Candidate Feed Tank Sampling QA/QC~~
~~Delete the word "discrete" from line 18 on page 6-2 and insert the word "unique"~~

Appendix 3A, Section 6.1.2:

6.1.2 Candidate Feed Tank Sampling Quality Assurance and Quality Control

For each candidate feed tank sample, ~~four 100-milliliter bottles are drawn: one bottle for the mixing and compatibility study, two bottles for organic analysis (one each for volatile organic analysis [VOA] and semi-volatile organic analysis [semi-VOA]), and one bottle for inorganic analysis~~ [redacted]. All sample bottles are precleaned, amber-colored glass bottles sealed with Teflon* caps [redacted], ~~except for~~ [redacted] the sample bottle for VOA, ~~which is~~ [redacted] sealed with septum cap and lined septum.

For candidate feed tank sampling quality control, one field blank, consisting of ~~four 100-milliliter bottles, is taken during the sample event: two bottles for organic analysis (one each for VOA and semi-VOA) and two bottles for inorganic analysis~~ [redacted]. Field blanks are inserted approximately ~~1 foot~~ [redacted] into any one of the sample risers used during the sample event. One trip blank, [redacted] consisting of ~~two 100-milliliter bottles, is also taken during each sample event: one bottle for VOA and one bottle for semi-VOA~~ [redacted]. Trip blanks are analyzed [redacted] ~~for those constituents detected in the field blanks~~. Field and trip blanks use the same types of sample bottles as the actual samples and are filled with reagent-grade water before shipment to the field.

Preservatives are not used with candidate feed tank samples because of concerns with high radiation exposure that would result from additional handling of sample solutions. It is not practical to refrigerate the bulky, shielded sample pigs and shipping containers. Biological activity, generally the largest problem in environmental samples, is unlikely in candidate feed tank samples because of the high salt content, pH, and radioactivity.

The chain of custody is documented on a data sheet that includes a ~~discrete~~ [redacted] sample number, date and time sample was taken, custody seal number, and signature of the sampler. When possession of the sample is transferred to other persons, such as the shipper or laboratory, the signature of the relinquisher and receiver are recorded, along with date and time of the transfer. The receiver at the laboratory also documents on the data sheet that the sample seal number is correct and the seal is intact. The chain-of-custody data sheets are included in the operating record.

*Teflon is a trademark of E.I. DuPont de Nemours & Company

Modification Class: [1] [2] [3]	Class 1	Class [1]1	Class 2	Class 3
Please check one of the Classes:	X			

Relevant WAC 173-303-830, Appendix I Modification: A.1. (Incorporating Permit Condition II.R., Equivalent material change)

Enter wording of the modification from WAC 173-303-830, Appendix I citation

A. General Permit Provisions
1. Administrative and informational changes.

Submitted by Co-Operator:	Reviewed by RL Program Office:	Reviewed by Ecology:	Reviewed by Ecology:
12/06/00	12/7/00		
E. S. Aromi Date	G. H. Sanders Date	F. Jamison Date	L.E. Ruud Date

[1] Class 1 modifications requiring prior Agency approval.

[2] This is only an advanced notification of an intended Class [1]1, 2, or 3 modification, this should be followed with a formal modification request, and consequently implement the required Public Involvement processes when required.

[3] If the proposed modification does not match any modification listed in WAC 173-303-830 Appendix I, then the proposed modification should automatically be given a Class 3 status. This status may be maintained by the Department of Ecology, or down graded to [1]1, if appropriate.

Hanford Facility RCRA Permit Modification Notification Form

Unit:	Permit Part & Chapter:
242-A Evaporator	**Part III, Chapter 5 and Attachment 35**

Description of Modification:

Appendix 3A, Section 6.2:

6.2 ANALYTE SELECTION AND RATIONALE

The DQO analysis for the 242-A Evaporator examined the data needs for sampling the candidate feed tanks and determined that the analyses in Table [redacted]-5 should be conducted to satisfy WAC 173-303-300 requirements. Table [redacted]-5 also contains the rationale for these parameters being selected. Section 5.0 provides additional detail on the rationale.

For information on process condensate sample analyte selection and rationale, refer to the LERF/ETF WAP (HNF-SD-ENV-WAP-008).

Modification Class: [1,2,3]	Class 1	Class [1]1	Class 2	Class 3
Please check one of the Classes:	X			

Relevant WAC 173-303-830, Appendix I Modification: A.1.

Enter wording of the modification from WAC 173-303-830, Appendix I citation

A. General Permit Provisions

1. Administrative and informational changes.

Submitted by Co-Operator:	Reviewed by RL Program Office:	Reviewed by Ecology:	Reviewed by Ecology:
12/06/00	12/7/00	12/8/00	6/18/01
E. S. Aromi Date	G. H. Sanders Date	F. Jamison Date	L.E. Ruud Date

[1] Class 1 modifications requiring prior Agency approval.

[2] This is only an advanced notification of an intended Class [1]1, 2, or 3 modification, this should be followed with a formal modification request, and consequently implement the required Public Involvement processes when required.

[3] If the proposed modification does not match any modification listed in WAC 173-303-830 Appendix I, then the proposed modification should automatically be given a Class 3 status. This status may be maintained by the Department of Ecology, or down graded to [1]1, if appropriate.

Hanford Facility RCRA Permit Modification Notification Form

Unit:	Permit Part & Chapter:
242-A Evaporator	**Part III, Chapter 5 and Attachment 35**

Description of Modification:

Appendix 3A, Section 7.2 & 7.3:

7.2 ANALYTICAL METHODS

The analytical methods that must be followed for RCRA sampling of the candidate feed tanks are included in Table [redacted]-5. Performance-based specifications rather than procedure-based specifications are used for determining the appropriate analytical methods. This allows for necessary adjustments to the methods for Hanford Facility-specific issues, related to high radioactivity of the sample matrix, while ensuring acceptable data quality. Because of the high radioactivity, the analytical method will in some cases deviate from those in national standards such as *Test Methods For Evaluating Solid Waste*, SW-846 (EPA 1986) and *Standard Methods for the Examination of Water and Waste Water* (AWWA 1989).

7.3 LABORATORY QUALITY ASSURANCE AND QUALITY CONTROL

Candidate feed tank analytical and sampling methods conducted as part of this plan meet the data quality requirements contained in Table 7[redacted]. Quality control check samples (i.e., calibration samples and/or laboratory control samples) generally are performed once per sample event (e.g., once for all samples from one candidate feed tank). Matrix spike and matrix spike-duplicate analysis are performed once per sample event for all methods except differential scanning calorimetry (DSC). A duplicate analysis is performed for DSC analysis to determine method accuracy.

Modification Class: [1 2 3]	Class 1	Class [1]1	Class 2	Class 3
Please check one of the Classes:	X			

Relevant WAC 173-303-830, Appendix I Modification: A.1.

Enter wording of the modification from WAC 173-303-830, Appendix I citation

A. General Permit Provisions

1. Administrative and informational changes.

Submitted by Co-Operator:	Reviewed by RL Program Office:	Reviewed by Ecology:	Reviewed by Ecology:
E. S. Aromi Date 12/06/00	G. H. Sanders Date 12/7/00	F. Jamison Date 12/6/00	L.E. Ruud Date 12/8/01

[1] Class 1 modifications requiring prior Agency approval.

[2] This is only an advanced notification of an intended Class [1]1, 2, or 3 modification, this should be followed with a formal modification request, and consequently implement the required Public Involvement processes when required.

[3] If the proposed modification does not match any modification listed in WAC 173-303-830 Appendix I, then the proposed modification should automatically be given a Class 3 status. This status may be maintained by the Department of Ecology, or down graded to [1]1, if appropriate.

Hanford Facility RCRA Permit Modification Notification Forms

Part III, Chapter 6 and Attachment 36
325 Hazardous Waste Treatment Units

Index

Hanford Facility RCRA Permit Modification Notification Form

Unit:	Permit Part & Chapter:
325 Hazardous Waste Treatment Units	**Part III, Chapter 6 and Attachment 36**

Description of Modification:

Hanford Facility RCRA Permit, III.6.A.:

Chapter 2.2 Topographic Map, [redacted] ~~from~~ Class 1 Modification for quarter ending [redacted] ~~June 30, 1998~~

Modification Class: [1 2 3]	Class 1	Class [1]1	Class 2	Class 3
Please check one of the Classes:	X			

Relevant WAC 173-303-830, Appendix I Modification: A.1.

Enter wording of the modification from WAC 173-303-830, Appendix I citation

A. General Permit Provisions

1. Administrative and Informational changes.

Submitted by Co-Operator:	Reviewed by RL Program Office:	Reviewed by Ecology:	Reviewed by Ecology:
A.K. Ikenberry 12/29/00 Date	R.F. Christensen 12/29/00 Date	F. Jamison 04/26/01 Date	L.E. Ruud 6/18/01 Date

[1]Class 1 modifications requiring prior Agency approval.

[2] This is only an advanced notification of an intended Class [1]1, 2, or 3 modification, this should be followed with a formal modification request, and consequently implement the required Public Involvement processes when required.

[3] If the proposed modification does not match any modification listed in WAC 173-303-830 Appendix I, then the proposed modification should automatically be given a Class 3 status. This status may be maintained by the Department of Ecology, or down graded to [1]1, if appropriate.

Hanford Facility RCRA Permit Modification Notification Form

Unit:	Permit Part & Chapter:
325 Hazardous Waste Treatment Units	**Part III, Chapter 6 and Attachment 36**

Description of Modification:

Hanford Facility RCRA Permit, III.6.A.:

Chapter 4.0 Process Information from Class 1 Modification for quarter ending December 31, [redacted]1998

Modification Class: [1 2 3]	Class 1	Class [1]1	Class 2	Class 3
Please check one of the Classes:	X			

Relevant WAC 173-303-830, Appendix I Modification: A.1.

Enter wording of the modification from WAC 173-303-830, Appendix I citation

A. General Permit Provisions

1. Administrative and Informational changes.

Submitted by Co-Operator:	Reviewed by RL Program Office:	Reviewed by Ecology:	Reviewed by Ecology:
A.K. Ikenberry Date	R.F. Christensen Date	F. Jamison Date	L.E. Ruud Date
13 Dec 00	12/29/00	12/29/00	6/18/01

[1]Class 1 modifications requiring prior Agency approval.

[2] This is only an advanced notification of an intended Class [1]1, 2, or 3 modification, this should be followed with a formal modification request, and consequently implement the required Public Involvement processes when required.

[3] If the proposed modification does not match any modification listed in WAC 173-303-830 Appendix I, then the proposed modification should automatically be given a Class 3 status. This status may be maintained by the Department of Ecology, or down graded to [1]1, if appropriate.

Hanford Facility RCRA Permit Modification Notification Form

Unit:	Permit Part & Chapter:
325 Hazardous Waste Treatment Units	**Part III, Chapter 6 and Attachment 36**

Description of Modification:

Hanford Facility RCRA Permit, III.6.A.:

Chapter 6.0 Procedures to Prevent Hazards from Class 1 Modification for quarter ending December 31, [redacted] ~~1998~~

Modification Class: [1] [2] [3]	Class 1	Class [1]1	Class 2	Class 3
Please check one of the Classes:	X			

Relevant WAC 173-303-830, Appendix I Modification: A.1.

Enter wording of the modification from WAC 173-303-830, Appendix I citation

A. General Permit Provisions

1. Administrative and Informational changes.

Submitted by Co-Operator:	Reviewed by RL Program Office:	Reviewed by Ecology:	Reviewed by Ecology:
A.K. Ikenberry / Date 12/28/00	R.F. Christensen Date 12/29/00	F. Jamison Date 6/18/01	L.E. Ruud Date 6/18/01

[1] Class 1 modifications requiring prior Agency approval.

[2] This is only an advanced notification of an intended Class [1]1, 2, or 3 modification, this should be followed with a formal modification request, and consequently implement the required Public Involvement processes when required.

[3] If the proposed modification does not match any modification listed in WAC 173-303-830 Appendix I, then the proposed modification should automatically be given a Class 3 status. This status may be maintained by the Department of Ecology, or down graded to [1]1, if appropriate.

Hanford Facility RCRA Permit Modification Notification Form

Unit:	Permit Part & Chapter:
325 Hazardous Waste Treatment Units	**Part III, Chapter 6 and Attachment 36**

Description of Modification:

Hanford Facility RCRA Permit, III.6.A.:

Chapter 11.0 Closure and Financial Assurance [redacted]

Modification Class: [1 2 3]	Class 1	Class [1]1	Class 2	Class 3
Please check one of the Classes:	X			

Relevant WAC 173-303-830, Appendix I Modification: A.1.

Enter wording of the modification from WAC 173-303-830, Appendix I citation

A. General Permit Provisions

1. Administrative and Informational changes.

Submitted by Co-Operator:	Reviewed by RL Program Office:	Reviewed by Ecology:	Reviewed by Ecology:
A.K. Ikenberry 12/20/00 Date	R.F. Christensen 12/29/00 Date	F. Jamison Date	L.E. Ruud 6/18/01 Date

[1]Class 1 modifications requiring prior Agency approval.

[2] This is only an advanced notification of an intended Class [1]1, 2, or 3 modification, this should be followed with a formal modification request, and consequently implement the required Public Involvement processes when required.

[3] If the proposed modification does not match any modification listed in WAC 173-303-830 Appendix I, then the proposed modification should automatically be given a Class 3 status. This status may be maintained by the Department of Ecology, or down graded to [1]1, if appropriate.

Hanford Facility RCRA Permit Modification Notification Form

Unit:	Permit Part & Chapter:
325 Hazardous Waste Treatment Units	**Part III, Chapter 6 and Attachment 36**

Description of Modification:

Hanford Facility RCRA Permit, III.6.A.:

Appendix 3A 325 HWTUs Waste Analysis Plan from Class 1 Modification for quarter ending December 31, [redacted] ~~1998~~

Modification Class: [1] [2] [3]	Class 1	Class [1]1	Class 2	Class 3
Please check one of the Classes:	X			

Relevant WAC 173-303-830, Appendix I Modification: A.1.

Enter wording of the modification from WAC 173-303-830, Appendix I citation

A. General Permit Provisions

1. Administrative and Informational changes.

Submitted by Co-Operator:		Reviewed by RL Program Office:		Reviewed by Ecology:		Reviewed by Ecology:	
A.K. Ikenberry	Date	R.F. Christensen for	Date	F. Jamison	Date	L.E. Ruud	Date
13 Dec 00		12/29/00		12/28/00		6/18/01	

[1] Class 1 modifications requiring prior Agency approval.

[2] This is only an advanced notification of an intended Class [1]1, 2, or 3 modification, this should be followed with a formal modification request, and consequently implement the required Public Involvement processes when required.

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Hanford Facility RCRA Permit Modification Notification Form

Unit:	Permit Part & Chapter:
325 Hazardous Waste Treatment Units	**Part III, Chapter 6 and Attachment 36**

Description of Modification:

Remove Chapter 2.0 and replace with the attached Chapter 2.0.
Chapter 2.0:

These Chapters were modified to reflect the installation of the Radioactive Liquid Waste Tank system.

Modification Class: [1] [2] [3]	Class 1	Class [1]1	Class 2	Class 3
Please check one of the Classes:	X			

Relevant WAC 173-303-830, Appendix I Modification: A.1.

Enter wording of the modification from WAC 173-303-830, Appendix I citation

A. General Permit Provisions

1. Administrative and Informational changes.

Submitted by Co-Operator:		Reviewed by RL Program Office:		Reviewed by Ecology:		Reviewed by Ecology:	
A.K. Ikenberry	Date	R.F. Christensen for	Date	F. Jamison	Date	L.E. Ruud	Date

[1] Class 1 modifications requiring prior Agency approval.

[2] This is only an advanced notification of an intended Class [1]1, 2, or 3 modification, this should be followed with a formal modification request, and consequently implement the required Public Involvement processes when required.

[3] If the proposed modification does not match any modification listed in WAC 173-303-830 Appendix I, then the proposed modification should automatically be given a Class 3 status. This status may be maintained by the Department of Ecology, or down graded to [1]1, if appropriate.

Hanford Facility RCRA Permit Modification Notification Form

Unit:	Permit Part & Chapter:
325 Hazardous Waste Treatment Units	**Part III, Chapter 6 and Attachment 36**

Description of Modification:

Remove Chapter 4.0 and replace with the attached Chapter 4.0.
Chapter 4.0:

These Chapters were modified to reflect the installation of the Radioactive Liquid Waste Tank system.

Modification Class: [1 2 3]	Class 1	Class [1]1	Class 2	Class 3
Please check one of the Classes:	X			

Relevant WAC 173-303-830, Appendix I Modification: A.1.

Enter wording of the modification from WAC 173-303-830, Appendix I citation

A. **General Permit Provisions**
   1. **Administrative and Informational changes.**

Submitted by Co-Operator:	Reviewed by RL Program Office:	Reviewed by Ecology:	Reviewed by Ecology:
A.K. Ikenberry Date	R.F. Christensen Date	F. Jamison Date	L.E. Ruud Date
	for		

[1]Class 1 modifications requiring prior Agency approval.

[2] This is only an advanced notification of an intended Class [1]1, 2, or 3 modification, this should be followed with a formal modification request, and consequently implement the required Public Involvement processes when required.

[3] If the proposed modification does not match any modification listed in WAC 173-303-830 Appendix I, then the proposed modification should automatically be given a Class 3 status. This status may be maintained by the Department of Ecology, or down graded to [1]1, if appropriate.

Hanford Facility RCRA Permit Modification Notification Form

Unit:	Permit Part & Chapter:
325 Hazardous Waste Treatment Units	**Part III, Chapter 6 and Attachment 36**

Description of Modification:

Chapter 4.0, Section 4.1.4.1:

4.1.4.1 Secondary Containment System Design and Operation for the Hazardous Waste Treatment Unit

The secondary containment system for the HWTU has three primary components: uniform fire code-approved flammable liquid storage cabinets, the floor of the rooms, and the fire water containment system (Figure 4.1).

Mixed and/or dangerous waste, in containers of 65 liters or less, is stored in Room 520 in steel flammable storage cabinets located in a storage room that forms the northeast corner of the room. An additional flammable storage cabinet is located beneath a stainless steel ventilated hood located along the south wall of Room 520. Containers over 65 liters are stored in a hood located along the east wall of the room. The containers are made of stainless steel or other suitable material depending on the characteristics of the waste and are kept closed except when waste is being added or withdrawn.

Dangerous waste in containers of 65 liters or less is stored in Room 528 steel storage cabinets in accordance with WAC 173-303-395(1)(a) and the Uniform Building Code (ICBO 1991). There are ~~five~~ [redacted] storage cabinets, ~~three~~ [redacted] for flammable waste and ~~two~~ [redacted] for corrosive waste. Two cabinets (one flammable storage cabinet and one corrosive storage cabinet) are located along the north wall of the room. ~~A~~ [redacted] cabinet for corrosive waste is located along the east wall. ~~A~~ [redacted] cabinet for flammable waste also is located along the south wall. Further storage is provided by a flammable cabinet located beneath a stainless steel ventilated hood on the east wall of the room. Each cabinet is clearly marked as containing either flammable or corrosive waste. Flammable waste cabinets are painted yellow, and corrosive cabinets are painted blue.

Rooms 520 and 528 are located on the main floor of the 325 Building and are constructed of concrete. The concrete floors of both rooms have been equipped with a heat-sealed seamless chemical-resistant polypropylene coating that covers the entire floor area of both rooms and laps approximately 10 centimeters up all of the outside walls of each room. The coated floor is capable of containing minor spills and leaks of liquid mixed waste. In addition, because the floors are not sloped, waste containers stored on the floors are elevated or otherwise protected to prevent the container from coming in contact with spilled waste.

Major spills or leaks of liquid mixed waste flow into the fire water containment system. The fire water containment system consists of floor trenches located at each entrance to the rooms and the fire water containment tank located in the basement of the building. The system is designed to collect the fire-suppression water in the event that the automatic sprinkler system was activated. The location of the trenches is shown in Figure 4.1.

The floor trenches located under the double doors on the west side of Rooms 520 and 528 are approximately 20 centimeters wide, 46 centimeters deep and 1.91 meters long. The floor trench located under the single south door of Room 520 is approximately 20 centimeters wide, 46 centimeters deep, and 1.5 meters long. The floor trench located under the single southwest door of Room 528 is 20 centimeters wide, 61 centimeters deep, and 1.5 meters long. The trenches extend completely across the entrance of each room so that liquids do not flow out through a doorway. The trenches are constructed of 14-gauge stainless steel and are equipped with a steel grate cover. All seams are welded to ensure integrity. Trenches under the double doors are equipped with two drains in the bottom, and trenches located under single doors are equipped with one drain to allow liquid to drain from the trench through 15-centimeter-diameter carbon steel piping to the fire water containment tank.

The fire water containment tank is located beneath Room 520 in the basement of the 325 Building. The rectangular tank has dimensions of 1.65 meters by 2.25 meters by 1.92 meters and a capacity of 22,710 liters. The sides and floor of the tank are constructed of epoxy-coated carbon steel plate. The steel sides and floor provide support for the chemical-resistant polypropylene liner. The tank is secured to the concrete floor of the 325 Building basement with 1.3-centimeter bolts at 1.82-meter intervals.

The possibility of mixing incompatible waste in the containment system is minimized, because the number of containers open at one time will be limited to those in process (waste not in process is stored in closed containers). In addition, the very large volume of any firewater flow would dilute waste and would minimize the possibility of adverse reactions.

Modification Class: [1] [2] [3]	Class 1	Class [1]1	Class 2	Class 3
Please check one of the Classes:	X			

Relevant WAC 173-303-830, Appendix I Modification: A.1.

Enter wording of the modification from WAC 173-303-830, Appendix I citation

A. General Permit Provisions

1. Administrative and Informational changes.

Submitted by Co-Operator:	Reviewed by RL Program Office:	Reviewed by Ecology:	Reviewed by Ecology:
A.K. Ikenberry Date	R.F. Christensen Date	F. Jamison Date	L.E. Ruud Date

[1] Class 1 modifications requiring prior Agency approval.

[2] This is only an advanced notification of an intended Class [1]1, 2, or 3 modification, this should be followed with a formal modification request, and consequently implement the required Public Involvement processes when required.

[3] If the proposed modification does not match any modification listed in WAC 173-303-830 Appendix I, then the proposed modification should automatically be given a Class 3 status. This status may be maintained by the Department of Ecology, or down graded to [1]1, if appropriate.

Hanford Facility RCRA Permit Modification Notification Form

Unit:	Permit Part & Chapter:
325 Hazardous Waste Treatment Units	**Part III, Chapter 6 and Attachment 36**

Description of Modification:

Remove Chapter 6.0 and replace with the attached Chapter 6.0.
Chapter 6.0:

These Chapters were modified to reflect the installation of the Radioactive Liquid Waste Tank system.

Modification Class: [1,2,3]	Class 1	Class [1]1	Class 2	Class 3
Please check one of the Classes:	X			

Relevant WAC 173-303-830, Appendix I Modification: A.1.

Enter wording of the modification from WAC 173-303-830, Appendix I citation

A. General Permit Provisions
   1. Administrative and Informational changes.

Submitted by Co-Operator:		Reviewed by RL Program Office:		Reviewed by Ecology:		Reviewed by Ecology:	
A.K. Ikenberry	Date	R.E. Christensen for	Date	F. Jamison	Date	L.E. Ruud	Date

[1]Class 1 modifications requiring prior Agency approval.

[2] This is only an advanced notification of an intended Class [1]1, 2, or 3 modification, this should be followed with a formal modification request, and consequently implement the required Public Involvement processes when required.

[3] If the proposed modification does not match any modification listed in WAC 173-303-830 Appendix I, then the proposed modification should automatically be given a Class 3 status. This status may be maintained by the Department of Ecology, or down graded to [1]1, if appropriate.

Hanford Facility RCRA Permit Modification Notification Form

Unit:	Permit Part & Chapter:
325 Hazardous Waste Treatment Units	**Part III, Chapter 6 and Attachment 36**

Description of Modification:

Chapter 6.0, Section 6.3.1.3:

6.3.1.3. Emergency Equipment [F-3a(3)]

Emergency equipment available for trained 325 HWTUs personnel includes portable fire extinguishers, a fire suppression system, spill response equipment, and decontamination equipment.

With the exception of the hot cells, the entire building also is equipped with automatic sprinkler protection consisting of Schedule 40 steel pipe per ASTM A120 (ASTM 1991) and 150-pound malleable iron fittings per ANSI B16.3 (ANSI 1992). All components are UL-listed or FM-approved. The fire sprinkler system was designed and installed in accordance with NFPA 13 for "ordinary hazard" (NFPA 1996).

Absorbent pillows are capable of absorbing small quantities of spilled inorganic and organic liquids and can be used to contain temporarily any spills of these materials. Their rated absorption capacities range from 250 to 4,000 milliliters.

Mercury spill kits are capable of cleaning up to 25 milliliter of spilled mercury. Acid, caustic, and solvent spill kits contain the materials necessary to clean up small spills of acids, bases, and organic solvents. The absorbent kits in the SAL contain absorbent pads and other materials needed to temporarily contain and clean up small chemical spills.

The appropriate spill kits can be applied, respectively, to small acid and base spills for neutralization during cleanup efforts. The caustic neutralizer has similar capabilities for neutralizing small quantities of spilled bases. If needed, the Hanford Fire Department provides additional emergency equipment.

Hazardous Waste Treatment Unit

Two portable 4.5 kilogram ABC fire extinguishers are available adjacent to the HWTU as shown in Figure 6.1. The portable fire extinguishers are located in the hall between the entrances to Rooms 528 and 520 and in the hall south of the south entrance to Room 520.

Additionally, for decontamination of high levels of radioactivity, an emergency shower is located in Room 601, which is in close proximity to the HWTU. For chemical contamination needs, another emergency shower is located in the hall between the entrances to Rooms 520 and 528 (Figure 6.2). An emergency eyewash is located in Rooms 520 and 528. Any contaminated water will be contained and cleaned up in accordance with the 325 HWTU contingency plan. Effluents are managed via the RPS or RLWS.

Shielded Analytical Laboratory

Four 9.0-kilogram ABC portable fire extinguishers are located in the SAL. ~~Two~~ [redacted] portable fire extinguishers ~~are~~ [redacted] located in Room 201, and Rooms 200 and 203 each have one portable fire extinguisher. Additionally, ABC dry chemical fire extinguishers are provided for each of the six large interconnected hot cells in Room 201. These extinguishers are mounted on the outside of each cell with the distribution system within the cells. The cell manipulator arms are used to direct the discharge at a fire within the cell.

Two emergency eye wash/showers are located in Rooms 200 and 201 (Figure 6.2). Any contaminated water will be contained and cleaned up in accordance with the 325 HWTU's contingency plan.

Modification Class: [1] [2] [3]	Class 1	Class [1]1	Class 2	Class 3
Please check one of the Classes:	X			

Relevant WAC 173-303-830, Appendix I Modification: A.1.

Enter wording of the modification from WAC 173-303-830, Appendix I citation

A. General Permit Provisions

1. Administrative and Informational changes.

Submitted by Co-Operator:		Reviewed by RL Program Office:		Reviewed by Ecology:		Reviewed by Ecology:	
A.K. Ikenberry	Date	R.F. Christensen (for)	Date 12/29/00	F. Jamison	Date	L.E. Ruud	Date 6/18/01

[1]Class 1 modifications requiring prior Agency approval.

[2] This is only an advanced notification of an intended Class [1]1, 2, or 3 modification, this should be followed with a formal modification request, and consequently implement the required Public Involvement processes when required.

[3] If the proposed modification does not match any modification listed in WAC 173-303-830 Appendix I, then the proposed modification should automatically be given a Class 3 status. This status may be maintained by the Department of Ecology, or down graded to [1]1, if appropriate.

Hanford Facility RCRA Permit Modification Notification Form

Unit:	Permit Part & Chapter:
325 Hazardous Waste Treatment Units	**Part III, Chapter 6 and Attachment 36**

Description of Modification:

Remove Chapter 11.0 and replace with the attached Chapter 11.0.
Chapter 11.0:

These Chapters were modified to reflect the installation of the Radioactive Liquid Waste Tank system.

Modification Class: [1 2 3]	Class 1	Class [1]1	Class 2	Class 3
Please check one of the Classes:	X			

Relevant WAC 173-303-830, Appendix I Modification: A.1.

Enter wording of the modification from WAC 173-303-830, Appendix I citation

A. General Permit Provisions

1. Administrative and Informational changes.

Submitted by Co-Operator:	Reviewed by RL Program Office:	Reviewed by Ecology:	Reviewed by Ecology:
A.K. Ikenberry Date	R.F. Christensen Date	F. Jamison Date	L.E. Ruud Date
	For		

[1]Class 1 modifications requiring prior Agency approval.

[2] This is only an advanced notification of an intended Class [1]1, 2, or 3 modification, this should be followed with a formal modification request, and consequently implement the required Public Involvement processes when required.

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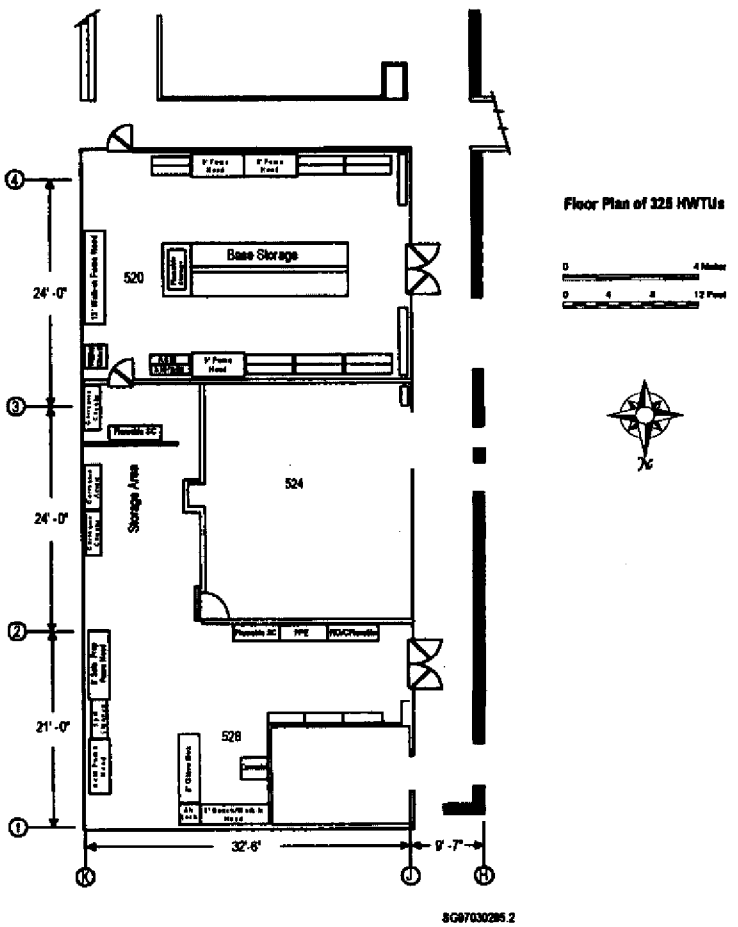
Hanford Facility RCRA Permit Modification Notification Form

Unit:	Permit Part & Chapter:
325 Hazardous Waste Treatment Units	**Part III, Chapter 6 and Attachment 36**

Description of Modification:
Remove Chapter 11.0 and replace with the attached Chapter 11.0.

Appendix 3A, Figure 1-4:
Updated Figure 1-4 to reflect current layout.



Modification Class: [1,2,3]	Class 1	Class [1]1	Class 2	Class 3
Please check one of the Classes:	X			

Relevant WAC 173-303-830, Appendix I Modification: A.1.

Enter wording of the modification from WAC 173-303-830, Appendix I citation

A. **General Permit Provisions**
1. **Administrative and Informational** changes.

Submitted by Co-Operator:		Reviewed by RL Program Office:		Reviewed by Ecology:		Reviewed by Ecology:	
A.K. Ikenberry	Date	R.F. Christensen	Date	F. Jamison	Date	L.E. Ruud	Date
	12/29/00	for	12/29/00				6/18/01

[1]Class 1 modifications requiring prior Agency approval.

[2] This is only an advanced notification of an intended Class [1]1, 2, or 3 modification, this should be followed with a formal modification request, and consequently implement the required Public Involvement processes when required.

[3] If the proposed modification does not match any modification listed in WAC 173-303-830 Appendix I, then the proposed modification should automatically be given a Class 3 status. This status may be maintained by the Department of Ecology, or down graded to [1]1, if appropriate.

Hanford Facility RCRA Permit Modifications

Part V, Chapter 17
1301-N Liquid Waste Disposal Facility

Replacement Section

Index

Section 4.0

Hanford Facility RCRA Permit Modification Notification Form

Unit:	Permit Part & Chapter:
1301-N Liquid Waste Disposal Facility	**Part V, Chapter 17**

Description of Modification:

Hanford Facility RCRA Permit, V.17.A.:

Section A4.0 Closure from Class 1 Modifications for Quarter ending December 31, 2000

Modification Class: [1] [2] [3]	Class 1	Class [1]1	Class 2	Class 3
Please check one of the Classes:		X		

Relevant WAC 173-303-830, Appendix I Modification: D.1.b.

Enter wording of the modification from WAC 173-303-830, Appendix I citation

D. Closure

1. Changes to the closure plan:
   b. **Changes in the closure schedule for any unit, changes in the finial closure schedule for the facility, or extension of the closure period, with prior approval of the director.**

Submitted by Co-Operator:		Reviewed by RL Program Office:		Reviewed by Ecology:		Reviewed by Ecology:	
T. E. Logan	Date 12/11/00	R. E. Gerton	Date 1/3/01	J. B. Price	Date 6-26-01	L. E. Ruud	Date 6/26/01

[1] Class 1 modifications requiring prior Agency approval.

[2] This is only an advanced notification of an intended Class [1]1, 2, or 3 modification, this should be followed with a formal modification request, and consequently implement the required Public Involvement processes when required.

[3] If the proposed modification does not match any modification listed in WAC 173-303-830 Appendix I, then the proposed modification should automatically be given a Class 3 status. This status may be maintained by the Department of Ecology, or down graded to [1]1, if appropriate.

Hanford Facility RCRA Permit Modification Notification Form

Unit:	Permit Part & Chapter:
1301-N Liquid Waste Disposal Facility	**Part V, Chapter 17**

Description of Modification:

Section A4.9:

Section A4.9: Closure Schedule

The closure schedule for 1301-N (116-N-1) and 1325-N (116-N-3) is presented in Figure A-4. Closure activities (actual cleanup) for 116-N-3 will begin in July 2000 and will continue for an approximate duration of 15 months.

[redacted]

[redacted]

[redacted]

~~At the completion of 116-N-3, closure activities at 116-N-1 will begin. The approximate duration of completion for both TSD units is 3 years.~~ The corrective action schedule of compliance for UPR-100-N-31 will be the same as the closure schedule.

Modification Class: [1 2 3]	Class 1	Class [1]1	Class 2	Class 3
Please check one of the Classes:		X		

Relevant WAC 173-303-830, Appendix I Modification: D.1.b.

Enter wording of the modification from WAC 173-303-830, Appendix I citation

D. Closure
1. Changes to the closure plan:
   b. **Changes in the closure schedule for any unit, changes in the finial closure schedule for the facility, or extension of the closure period, with prior approval of the director.**

Submitted by Co-Operator:	Reviewed by RL Program Office:	Reviewed by Ecology:	Reviewed by Ecology:
12/1/00	For 1/3/01	6-26-01	6/26/01
T. E. Logan Date	R. E. Gerton Date	J. B. Price Date	L. E. Ruud Date

[1]Class 1 modifications requiring prior Agency approval.

[2] This is only an advanced notification of an intended Class [1]1, 2, or 3 modification, this should be followed with a formal modification request, and consequently implement the required Public Involvement processes when required.

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